

2012

Berkeley CERT Above Ground Water System Hose Deployment Exercise



Khin Chin

Berkeley CERT

Berkeley Fire Department

9/28/2012

Executive Summary

This after action report is intended to assist the City of Berkeley's CERT (Community Emergency Response Team) program by identifying strengths, identifying potential areas for further improvement and by recommending follow up actions learned from the CERT Above Ground Water System Hose Deployment Exercise.

On September 28, 2012, Berkeley Fire Department (BFD) conducted Above Ground Water System hose deployment refresher training for fire department personnel. Fire Department crews exercised the limited deployment of approximately ½ mile of 12 inch diameter fire hose. Berkeley CERT conducted an operational exercise in support of this training to simulate the potential role for volunteer resources should this system need to be deployed. In addition, the CERT exercise was conducted to practice organizational skills in the incident command system and the deployment of organized teams of volunteers to complete operational missions. CERT maintained a separate Incident Action Plan (IAP) and a separate Incident Command System (ICS) organization. Northern Alameda County Amateur Radio Emergency Service Radio Amateur Civil Emergency Service (NALCO ARES RACES) provided radio supplemental communication through rover units and stationing of one radio operator at the CERT Command Post.

The exercise included activation and call out of Berkeley CERT, the setup of a CERT command post, deployment of two operations groups under the CERT Operations Section Chief, Traffic Group and Hose Inspection Group, and demobilization.



Strengths

Key strengths identified included:

- Incident Command System was effectively utilized to manage teams of responders.
- Coordination with Berkeley Fire Department and completion of the assigned mission was conducted efficiently.
- CERT volunteer check-in documentation and demobilization documentation was organized and complete.

Areas for Improvement

Recommendations for improvement included:

- Accountability of CERT Operations Section groups should be improved so that group supervisors have updated status of their team members at all times.
- Radio monitoring and the importance of accountability should be improved through additional practice and possibly with equipment that will keep the radio closer to user's ears.
- Assignment and utilization of the CERT Safety Officer should be more appropriately implemented.

Exercise and Response Objectives

1. Utilize Incident Command System (ICS) to organize a safe and effective response mission.
2. Mobilize and demobilize CERT equipment, volunteer personnel, and command post.
3. Effectively and efficiently coordinate with the Fire Department and complete assigned missions of simulated traffic control and hose line inspection.



Narrative

Berkeley's Above Ground Water System provides a back-up water supply to support firefighting efforts during a disaster. It is the first large scale system in use in the United States. Berkeley's system has the capacity to extend 6 miles of 12 inch diameter hose with a potential to deliver up to 12,000 gallons per minute. Because of the potential level of effort and coordination necessary to deploy equipment of this scale in Berkeley, the use of trained volunteers to supplement professional responders may be integral. Berkeley CERT's participation in establishing a coordinated response exercise in conjunction with Fire Department training on this system provides an opportunity to familiarize volunteers in the potential role they may have in maintaining the system's integrity and establishing safe traffic diversion during deployment.

CERT's operational exercise was a preplanned event and an Incident Action Plan was distributed to CERT members 8 days prior to the operation. 16 CERT members responded on September 28, 2012 and reported to the command post at Aquatic Park.

The first arriving CERT member was assigned CERT Incident Commander and immediately as incoming team members arrived, Operations Section and Logistics Sections were established. Logistics began check-in and documentation of incoming personnel, assigned and checked-out personal protective equipment, as well as designating a staging area and coordinating vehicle parking for incoming personnel. The Operations Section Chief began working with CERT Incident Commander to develop the operational briefing and interfacing with BFD command.

At 1340 hours, the 9 assigned CERT Operations Section personnel and the CERT Incident Commander received an operational briefing from BFD. Two CERT Operations Groups were then established by the CERT Operations Section Chief. The Traffic Group was assigned to establish traffic diversion devices along simulated traffic intersections as the hose was being deployed. The Hose Inspection group was assigned to conduct visual inspection of the deployed hose to help ensure integrity of the equipment. Two CERT FRS radio channels were designated, one for command and one for tactical communications. At 1439 hours, ½ mile of hose was completely deployed and inspected and the CERT mission was completed.



Berkeley CERT Above Ground Water System Hose Deployment Exercise
September 28, 2012

Overview

Activity Name

Berkeley CERT Above Ground Water System Hose Deployment Exercise

Duration

2 hours

Exercise Dates

September 17, 2012 – Activation and Call Out (via email)

September 28, 2012 – CERT Team Deployment

Participating Agencies

Berkeley Community Emergency Response Team (CERT)

Berkeley Fire Department

NALCO ARES RACES

Number of Participants

Players 16

Evaluators 1

Controllers 2

Focus

- Response
- Recovery
- Prevention
- Other

Type of Exercise

Full Scale



Evaluation

Exercise evaluation was conducted through player and controller hotwash and online survey. The exercise was designed to provide participants with an opportunity to assess current capabilities and procedures required to activate CERT-trained community members to respond to a scenario where there was a need for deployment of the water system. Participants identified strengths, weaknesses, and future training needs. Observations focus primarily on overall actions, interactions and challenges rather than on individual players.

Event Chronology

Date	Time	Event or Activity Description, Notes, Comments
9/17	0951 hrs	Initial CERT Team callout sent out via email to 102 volunteers. 17 positive responses, 1 negative.
9/20	1654 hrs	CERT Responders received the Incident Action Plan (IAP)
9/28	1211 hrs	CERT Incident Command Post (ICP) and operational equipment staged.
9/28	1250 hrs	1 st CERT Volunteer arrives and is assigned CERT Incident Command. Logistics Section Chief and Operations Section Chief positions are established. Logistics initiated documentation of personnel resources and equipment resources and a staging area. Operations began development of an operational briefing.
9/28	1252 hrs	1 st NALCO radio operator arrives at CERT ICP
9/28	1335 hrs	Final CERT responder arrives and checks in at CERT ICP
9/28	1340 hrs	Operational briefing with BFD
9/28	1350 hrs	CERT Traffic Group and CERT Hose Inspection Group were established in Operations and deployed.
9/28	1439 hrs	CERT mission complete. Demobilization of CERT personnel and equipment.
9/28	1508 hrs	CERT responders hotwash and release.



Demonstrated Strengths and Improvement Plan

Participants met all exercise objectives. Key strengths demonstrated include effective use of ICS to coordinate a team of CERT members; mobilization, complete documentation, and demobilization of CERT personnel and equipment resources; and efficient coordination with Fire Department.

- Incident Command System was effectively utilized to manage teams of responders. CERT members understood the ICS organizational structure and operated within their assigned roles. Freelancing was not observed and chain of command for communications and assignment of tasks was evident.
- Coordination with Berkeley Fire Department and completion of the assigned mission was conducted efficiently. CERT maintained its own ICS structure independent of the Fire Department mission and effectively stayed within the assigned scope of operations. The CERT Incident Commander served as a single point of contact for CERT operations in relation to BFD operations. The ability of CERT to provide volunteers with an organized framework independent of fire department command over an incident allowed for efficient utilization of volunteer resources and accountability for assigned missions.
- CERT volunteer check-in documentation and demobilization documentation was organized and complete. Incoming CERT volunteers were checked in at the command post and issued personal protective equipment by the CERT Logistics Section. Both during mobilization and demobilization, equipment and personnel were accounted for and documented. All paperwork was completed and delivered to Incident Command prior to release.

Some areas of improvement identified include the need to improve the personnel accountability of CERT Operations Section groups, to emphasize and implement radio monitoring for responders who were issued radios for communications, and to train on the role of the Safety Officer within CERT's ICS.

- Accountability of Operations Section groups should be improved so that group supervisors have updated status of their team members at all times. Instances of CERT Operations Group Supervisors unable to confirm status of all team members when asked for a personnel accountability report occurred. Team accountability as a key responsibility of the group supervisor should be emphasized in all training, exercise, and real life emergency deployments.
- Radio traffic monitoring and the importance of accountability should be improved through additional practice and possibly with equipment that will keep the radio closer to users' ears. Many instances of CERT members unresponsive to attempts to reach them via radio communications occurred. Lack of accountability on the radio can result in expenditure of resources to verify cause for unresponsiveness including, as evident in this exercise, deployment of additional personnel from the command post, staging, or another operational assignment to confirm status of the unresponsive team member. Additional experience with radio communications can instill the importance of responsibility with radio traffic monitoring.
- Assignment and utilization of the CERT Safety Officer should be more appropriately implemented. Additional training on how to utilize personnel to function in the Safety Officer role should be integrated into position specific continuing education training in CERT.



Conclusion

The Berkeley CERT Above Ground Water System Hose Deployment Exercise provided an opportunity for trained community responders to implement an organized emergency response in coordination with Berkeley Fire Department. By integrating trained volunteer responders who can organize into an independent ICS structure and serve as a ready resource when called upon for a specific mission within their scope of training, the capabilities of the City's emergency response can be enhanced. Berkeley CERT has improved since its last operational exercise in March 2012 in the areas of ICS organization, documentation and personnel check in and demobilization procedures. Continued development of radio communications skills, personnel accountability on Operations Section groups, and the assignment and responsibilities of a Safety Officer should be pursued.

CERT training and continuing education provided volunteer responders with the knowledge and skills to be effective. Exercising of skills through planned simulation scenarios and through real-life application of skills, CERT members become more effective and safe as responders when needed in the community.